Job Description

Job Title: Business Unit Mechanical Engineer
Department: (447) Concrete Products Business Unit
Location: (10) Insteel Wire Products, Mount Airy, NC
Reports To: Business Unit Engineering Manager
FLSA Status: Exempt

SUMMARY
Designs, installs, maintains, troubleshoots, and repairs mechanical systems, apparatus and mechanical components of industrial machinery and equipment. Provides technical support for all maintenance personnel.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following:
Carries out responsibilities in accordance with the organization's policies and applicable laws. Other duties may be assigned.

Provides technical support to Business Unit General Managers and maintenance personnel regarding issues of a mechanical engineering nature, involving plant machinery, facilities and processes. (80%)
- Creates mechanical designs for new machinery or improvements to existing machinery, equipment and facilities.
- Directs the repair or replacement of malfunctioning machinery or equipment.
- Requisitions tools, parts, and equipment as directed.
- Uses 2D and 3D computer assisted engineering and design software and equipment to perform engineering tasks.
- Inspects completed work for conformance to drawings, specifications and safety.
- Performs compressed air system inspections to assure safe and efficient operation.

Provides engineering support for special projects including, but not limited to, component selection, vendors recommendations, and installation. (10%)

Stays current on developments in the industrial mechanical design field through continuing education. (5%)

Recommends and implements proper and timely predictive/preventive maintenance on all mechanical equipment. (5%)

SUPERVISORY RESPONSIBILITIES
Junior Mechanical Engineers or Mechanical Engineering Interns who may become part of the Engineering Group and as assigned by the Engineering Manager.
QUALIFICATIONS
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

EDUCATION and/or EXPERIENCE
The education requirements and experience requirement listed here indicate the minimum basic educational knowledge and the time required by a normal qualified person to perform the job duties of the position.

Education:
Bachelor degree or higher in Mechanical Engineering or equivalent from an ABET accredited institution, broad knowledge of practical mechanical operations, together with a comprehensive knowledge of the theories and practices of the mechanical engineering field. Computer skills including Microsoft Windows, Microsoft Office, 2D CAD and 3D solid modeling.

Experience:
A minimum of five (5) years work-related experience is required. An equivalent combination of education and work-related experience may be acceptable.

COMPLEXITY OF DUTIES
Diversified duties involving an intensive knowledge of a restricted field and a wide range of procedures. Requires judgment in the analysis of facts and circumstances surrounding individual problems and in the determination of action to be taken within the limits of standard or accepted practice.

CONFIDENTIAL DATA
Works with some confidential data which, if disclosed, may have adverse internal or minor external effect.

CERTIFICATES, LICENSES, REGISTRATIONS
None required. Professional Engineer or Registered Engineer in the State of Florida or equivalent is preferred.

PHYSICAL DEMANDS
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Continuously (more than 70%):
Sit

Frequently (30-70%):
Walk and move around
Perform repetitive movements
Talk or hear (normal or corrected)

Occasionally (up to 30%):
Bend, stoop, kneel, crouch or crawl
Reaching overhead with hands or arms
Stretch
Stand
Climb or balance
Rotate body from a sitting and standing position
Use hands to feel, touch, grasp or grip tools, objects, or handles
Taste or smell
Lift, carry, push or pull up to 50 pounds

Vision requirements of the job include:
Near acuity
Far acuity
Depth perception
Distinguish colors
Peripheral vision
Frequent change of focus

The use of mechanical controls includes:
Buttons
Knobs
Levers
Cranks
Pedals

EQUIPMENT USED
Continuously (more than 70%):
Computer

Frequently (30-70%):
Calculator

Occasionally (up to 30%):
Hand tools
Vehicles/heavy equipment such as a fork lift.
Machinery such as the production machinery, including responsibility for repair, maintenance, adjustments and set ups.
Measuring devices such as calipers, micrometers, flow meters, tap measures, and thermometers.
Routine office equipment such as telephone, fax, copier, printer, etc.

WORK ENVIRONMENT
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. The employee is responsible for minimizing accidents within the facility and for following established safety policies and procedures during performance of this job.

Good working conditions

Occasionally (up to 30%):
Heat (weather and non-weather related)
Cold (weather related)
Wet or humid conditions
Slippery floors, ramps, etc.
Vibration
Loud noise
Outside weather
Dust
Dirt
Moving or dangerous machinery
Electrical shock hazard
Work at heights (i.e. platform/ladder)
Toxic/caustic chemicals
Oil, grease, solvents
Explosive or incendiary danger
Outside travel

REQUIRED PROTECTIVE CLOTHING/DEVICES
Occasionally (up to 30%):
Earplugs/hearing protection
Safety goggles/glasses
Safety shoes
Harness
Gloves